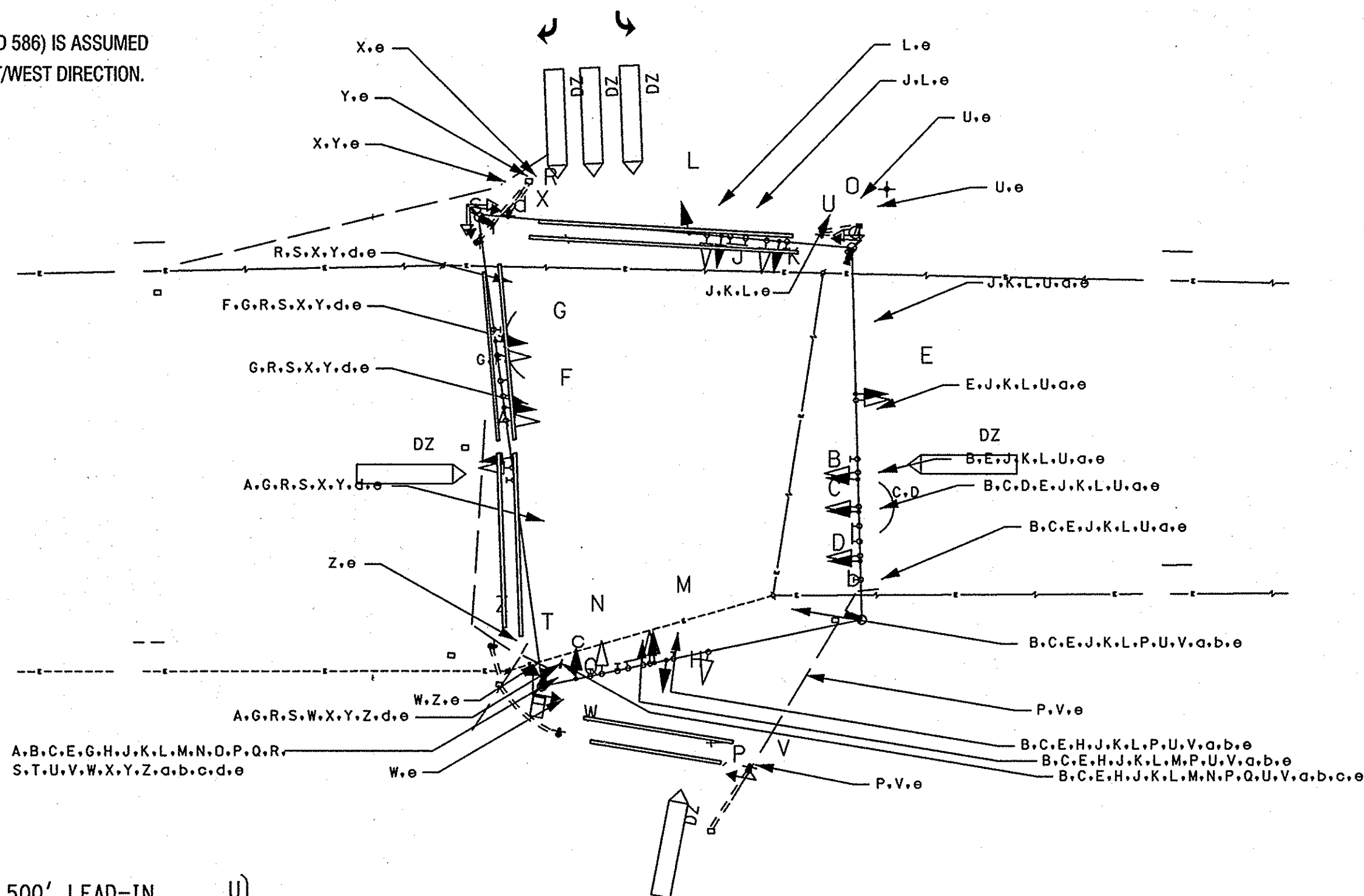


## WIRING DIAGRAM

VEIRS MILL ROAD (MD 586) IS ASSUMED  
TO RUN IN THE EAST/WEST DIRECTION.



### WIRING KEY

- a } CAMERA W/ 500' LEAD-IN TO CONTROLLER  
b } CAMERA W/ 300' LEAD-IN TO CONTROLLER  
c }  
d }  
A }  
B }  
C }  
D }  
E }  
F }  
G }  
H }  
J }  
K }  
L }  
M }  
N }  
P }  
Q }  
R }  
S }  
T }  
U }  
V }  
W }  
X }  
Y }  
Z }
- 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)  
STRANDED BARE COPPER GROUND WIRE (#6 AWG)  
CAMERA DETECTOR ZONE  
+ 3/4\"/>

### PROJECT DESCRIPTION

#### GENERAL

THIS PROJECT INVOLVES REPLACEMENT OF THE EXISTING TRAFFIC SIGNAL HEADS WITH NEW LED SIGNAL HEADS. THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS AND VIDEO DETECTION EQUIPMENT AT THE INTERSECTION OF MD 586 (VEIRS MILL ROAD) AT PARKLAND DRIVE AND GAYNOR ROAD IN MONTGOMERY COUNTY. THE CLEARANCE INTERVAL ALONG MD 586 WILL ALSO BE INCREASED.

MD 586 RUNS IN AN EAST-WEST DIRECTION.

### INTERSECTION OPERATION

#### NORMAL OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX PHASE, FULL-TRAFFIC ACTUATED MODE, WITH THE MD 586 APPROACHES RUNNING CONCURRENTLY. THE PARKLAND DRIVE/GAYNOR ROAD APPROACHES HAVE SPLIT PHASING.

THE EASTBOUND (MD 586), NORTHBOUND (GAYNOR ROAD) AND SOUTHBOUND (PARKLAND DRIVE) MOVEMENTS AT THIS INTERSECTION HAVE PROTECTED LEFT TURN PHASES. THE WESTBOUND (MD 586) APPROACH HAS A PERMISSIVE LEFT TURN.

A SIX SECOND CLEARANCE INTERVAL (4 SEC. YELLOW, 2 SEC. RED) IS TO BE PROVIDED FOR THE MD 586 (VEIRS MILL ROAD) EAST AND WEST APPROACHES.

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE NORTH, SOUTH AND WEST LEGS OF THE INTERSECTION ARE TO BE PROVIDED.

### CONTROLLER INFORMATION

THE EXISTING CONTROLLER AT THE INTERSECTION IS A NEMA EIGHT-PHASE, FULLY ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A BASE-MOUNTED CABINET.

SEE GENERAL NOTES ON SHEET FOR INSTRUCTIONS CONCERNING NAVIGATOR CENTRAL CONTROL UNIT.

### PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. JEFFREY WENTZ  
ASSISTANT DISTRICT ENGINEER  
TRAFFIC - 301-513-7318

MR. WAYNE MOWDY  
ASSISTANT DISTRICT ENGINEER  
MAINTENANCE - 301-513-7304

MR. AUGIE REBISH  
UTILITY ENGINEER  
UTILITIES - 301-513-7350

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
410-787-7630

MR. ED RODENHIZER  
CHIEF, SHA SIGNAL SHOP  
410-787-7652

ROBERT SNYDER  
CONSTRUCTION INSPECTION  
410-545-0390

CONTACT FOR MONTGOMERY COUNTY:

MR. KAMAL HAMUD  
MONTGOMERY COUNTY DEPARTMENT  
OF PUBLIC WORKS  
240-777-8795

### EQUIPMENT LIST "A"

EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT
9571	6 SF	SHEET ALUMINUM MAST ARM/POLEMOUNTED SIGNS
6 EA		R10-4(1) MOD "PUSH BUTTON TO CROSS" (W/INSTRUCTIONS) (9" X 15")

### EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	6 CY	CLASS 2 EXCAVATION
2002	3 CY	TEST PIT EXCAVATION
5001	380 LF	5" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5002	160 LF	5" HEAT APPLIED YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5003	510 LF	12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5004	60 LF	24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	1350 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5006	11 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS AND ARROWS
5008	4 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
6001	141 LF	DEPRESSED CURB AND GUTTER
6002	1033 SF	4" CONCRETE SIDEWALK
8001	39 EA	12 INCH R-Y-G L.E.D. SIGNAL HEAD 9 EA RED, YELLOW, GREEN BALL SECTION 2 EA RED ARROW SECTION 3 EA YELLOW ARROW SECTION 7 EA GREEN ARROW SECTION
8003	1 EA	2 WIRE CENTRAL CONTROL UNIT
8007	6 EA	8 INCH R-Y-G L.E.D. SIGNAL HEAD
8010	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGN (5"X7" WITH BRAILLE DENOTING CROSSING STREET)

## PHASING SEQUENCE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
◀R	◀R	R	R	R	R	R	R	R	R	R	R	R	WALK	WALK	WALK	WALK	DW	DW
◀Y	◀Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	FLDW	FLDW	FLDW	FLDW	DW	DW
◀G	◀G	G	G	G	G	G	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW

PHASE 2 AND 6	◀R	◀R	G	G	G	G	G	R	R	R	R	R	R	WALK	WALK	WALK	WALK	DW	DW
PED CLEARANCE	◀R	◀R	G	G	G	G	G	R	R	R	R	R	R	FLDW	FLDW	FLDW	FLDW	DW	DW
2 AND 6 CHANGE	◀R	◀R	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
THE CONTROLLER MAY SKIP TO PHASES 1 & 6																			
PHASE 1 & 6	◀G	◀G	G	G	R	R	R	R	R	R	R	R	R	DW	WALK	WALK	DW	DW	DW
1 & 6 CHANGE	◀Y	◀Y	G	G	R	R	R	R	R	R	R	R	R	DW	WALK	WALK	DW	DW	DW
PHASE 3	◀R	◀R	R	R	R	R	R	◀GG	◀GG	G	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 CHANGE	◀R	◀R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	◀R	◀R	R	R	R	R	R	R	R	◀GG	◀GG	G	DW	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	◀R	◀R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	◀R	◀R	R	R	R	R	R	R	R	◀GG	◀GG	G	DW	DW	DW	DW	WALK	WALK	DW
PED CLEARANCE	◀R	◀R	R	R	R	R	R	R	R	◀GG	◀GG	G	DW	DW	DW	DW	FLDW	FLDW	DW
PHASE 4 ALT CHANGE	◀R	◀R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK

### EMERGENCY VEHICLE PREEMPTION

EMERGENCY VEHICLE PREEMPTION PHASE 3	◀R	◀R	R	R	R	R	R	◀GG	◀GG	G	R	R	R	DW	DW	DW	DW	DW	DW
PREEMPTION CLEARANCE	◀R	◀R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 NORMAL OPERATION	◀R	◀R	R	R	R	R	R	R	R	◀GG	◀GG	G	DW	DW	DW	DW	DW	DW	DW

### EQUIPMENT LIST "B" CONT'D

ITEM NO.	QUANTITY	DESCRIPTION
8011	6 EA	BREAKAWAY PEDESTAL POLE
		5 EA 5' BREAKAWAY PEDESTAL POLE 1 EA 10' BREAKAWAY PEDESTAL POLE
8014	6 EA	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
8017	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8026	120 LF	SCHEDULE 80 RIGID PVC CONDUIT 3 IN - TRENCHED
8027	60 SF	DETECTABLE WARNING SURFACE
8033	900 LF	STRANDED BARE COPPER GROUND WIRE NO. 6 AWG
8044	1 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8047	4 EA	VIDEO DETECTION CAMERA AND CABLE (UP TO 500 FT)
8058	1035 LF	ELECTRICAL CABLE - 2 CONDUCTOR NO.14 AWG
8060	900 LF	ELECTRICAL CABLE - 5 CONDUCTOR NO.14 AWG
8061	2057 LF	ELECTRICAL CABLE - 7 CONDUCTOR NO.14 AWG

TOD NO:AT925-25  
SHA NO:MO281ASD/BSO  
MD 586 @ PARKLAND DRIVE



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 586 (Veirs Mill Rd.) @ Parkland Dr./Gaynor Rd.  
INSTALLATION OF APS AND VIDEO DETECTION

### GENERAL INFORMATION SHEET

SCALE NOT TO SCALE  
DATE 05-23-07  
CONTRACT NO. AT9255185

DESIGNED BY H. DONG  
DRAWN BY W. HENRY  
CHECKED BY  
F.A.P. NO.  
COUNTY MONTGOMERY  
LOGMILE 15058602.85  
TIMS NO. 1154  
TOD NO.

TS NO. 2708  
DRAWING TS 1 OF 1  
SHEET NO. 2 OF 2

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